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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,344

12/09/2003

Walter Fleischmann

17240

3553

23389

7590

03/18/2005

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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/731,344	FLEISCHMANN ET AL.	
	Examiner	Art Unit	
	Hargobind S. Sawhney	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/9/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The preliminary amendment filed on December 9, 2003 has been entered.

Accordingly:

- The specification and abstract have been amended;
- Claims 3--9 have been amended; and
- New claim 11 has been added.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleischmann (US Patent No.: 6,203,180 B1) in view of Bello, Jr. (US Patent No.: 6,481,877 B1).

Regarding Claim 1, Fleischmann ('180 B1) discloses an aircraft cabin lighting system 8 (Figure 1) comprising a plurality of lighting units 8 each including at least one light emitting diode (LEDs) 9 (Figure 1, column 2, lines 63-66). However, Fleischmann

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('180 B1) does not specifically teach each of the lighting units 8 being connected an output of a control device.

On the other hand, Bello ('877 B1) discloses a lighted automotive floor mats (Figure 2) comprising a plurality of lighting units 10 each including at least one LED 22 (Figure 2, column 2, lines 11-23). Fleischmann ('877 B1) further teaches each of the lighting units being connected to an output Qs (Figure 1) of a control device 20 (Figure 1, column 2, lines 48-56), and the device 20 actuating the light units in an operatively independent manner using respective switched TRs (Figure 1, column 2, lines 48-56).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the aircraft cabin lighting system of Fleischmann ('180 B1) by providing the control device as taught by Bello ('877 B1) for the benefits energy saving and operational flexibility of interior illumination of a vehicle.

Regarding claims 2-5, 8-10, Fleischmann ('180 B1) in view of Bello ('877 B1) discloses the aircraft cabin lighting system further comprising:

- the plurality of light units TRs, Ls – the combinations each including respective elements TRs and Ls – connected to the respective outputs Q1- Q9 of the control unit U2 (Bello, Figure 1, column 2, lines 48-56);
- the simultaneously actuated plurality of units 8 being connected in parallel with each other (Fleischmann, abstract and Claim 1);
- the lighting units 8 including a regulating module – included in a power supply unit 14 – supplying a constant current (Fleischmann, abstract, column 3, lines 10-20 and Claim 3);

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- the plurality of units 8 having a plurality of LEDs 9 being connected in series with each other (Fleischmann, abstract, column 3, lines 5-8 and Claim 5);
- the plurality of LEDs 9 representing the color-changing light pattern (Fleischmann, abstract, column 3, lines 26-35 and claims 7 and 8); and
- the arrangement of the LEDs 9 representing a starry sky (Fleischmann, abstract, column 1, lines 62-67) pattern; and
- the actuation of the lighting produce by the LEDs 9 (Fleischmann, abstract, column 2, lines 21-27) coupled to an event – an emergency -.

Regarding Claim 7, Fleischmann ('180 B1) in view of Bello ('877 B1) discloses the lighting system for an aircraft cabin, and the lighting system including a plurality of various color LEDs displaying design or image (Fleischmann, Figure 1, column 2, lines 19-30) on the ceiling of the cabin.

However, neither combined nor individual teaching of Fleischmann ('180 B1) and Bello ('877 B1) specifically teaches the lighting system arranged on or in the cabin wall, and supporting displaying of signs or images.

It would be have been obvious to one of ordinary skill in the art at the time of the invention to arrange the plurality of LEDs in the cabin walls, instead of making an LED arrangement in the ceiling, since it has been held that rearranging parts of an invention involves only routine skill in the art.

Regarding Claim 11, Fleischmann ('180 B1) in view of Bello ('877 B1) discloses the lighting system for an aircraft cabin, and the lighting system including a plurality of

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LEDs. However, neither combined nor individual teaching of Fleischmann ('180 B1) and Bello ('877 B1) specifically teaches the lighting system comprising five LEDs.

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the aircraft cabin lighting system of Fleischmann ('180 B1) in view of Bello ('877 B1) by providing five LEDs, since such a modification would have involved a mere change in size of the component. A change in size is generally recognized as being within the level of ordinary skill in the art.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fleischmann (US Patent No.: 6,203,180 B1) in view of Bello, Jr. (US Patent No.: 6,481,877 B1) as applied to Claim 1 above, and further in view of Kazar (US Patent No.: 5,008,595).

Fleischmann ('180 B1) in view of Bello ('877 B1) discloses the lighting system for an aircraft cabin, and the lighting system including a plurality of LEDs emitting different light colors including white produced by mixing different color lights from the LEDs.

However neither combined nor individual teaching of Fleischmann ('180 B1) and Bello ('877 B1) teaches the aircraft cabin light system including means for pulse width modulation.

On the other hand, Kazar ('595) discloses a lighting apparatus (Figure 1) including means supporting actuation of the LEDs 9 with pulse width modulation (Figures 1 and 9, column 7, 7, lines 32-37) for controlling the length of time of each selected LED for production of the predetermined light color.

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the aircraft cabin lighting system of Fleischmann ('180 B1) in view of Bello ('877 B1) by providing the LED modulating means as taught by Kazar (' 595) for the benefits and advantages of controlling the length of time of each selected LED for production of the predetermined light color.

### ***Conclusion***

5. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mitchell (U.S. Patent No. 6,614,126 B1), Bischoff, Jr. (U.S. Patent No. 6,159,882) and Harrison (U.S. Patent No. 4,794,373)

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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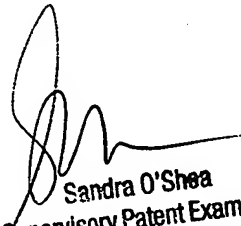
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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS

3/11/2005



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